

# 材料安全数据表

MSDS-1002

## MATERIAL SAFETY DATA SHEET

### 第一段 物品与制造商资料/SECTION I PRODUCT AND COMPANY INFORMATION

制造商名称: 沛祥五金电子有限公司 Manufacturer: POWER-SUNTECK METAL INC.	紧急联系电话: Urgent Tel: 0769-7295885
制造商地址: 广东省东莞市清溪镇九乡工业区 ADDRESS: Jiu Xiang Industrial Area, Qing Xi Town, DongGuan City, Guangdong Province, China	紧急传真: Urgent Fax: 0769-7295887
制品品名/型号: 锡膏 PS703A Product/Model: Solder paste PS703A	规格: Spec: Sn96.5/Ag3.0/Cu0.5
MSDS NO.: MSDS-1002	发行日期: 1/Jun/2005 Revised Date:

### 第二段 材料辨识含量/SECTION II INGREDIENTS / IDENTITY

化学品名称 Ingredients	WT. %	安全浓度 OSHA PEL	极限值 ACGHIH TLV	CAS#
锡 / Tin, Sn	96.5+/-0.5 of alloy	2.00mg/m <sup>3</sup>	2.00mg/m <sup>3</sup>	7440-31-5
银/Silver, Ag	3.0+/-0.5 of alloy	2.00mg/m <sup>3</sup>	2.00mg/m <sup>3</sup>	7440-22-4
铜 / Copper , Cu	0.5+/-0.2 of alloy	2.00mg/m <sup>3</sup>	2.00mg/m <sup>3</sup>	7440-50-8
松香、树脂 / Rosin	< 5.0	Not Established	Not Established	65997-05-9
聚乙二醇醚 / Polyglycol Ether	< 3.0	Not Established	Not Established	9038-95-3
羧基酸 / Carboxylic Acid	< 2.0	Not Established	Not Established	68937-72-4
氢化喹诺酮 Hydrocarbons	< 1.0	Not Established	Not Established	68475-70-7

### 危险等级 (Hazard Rating Systems)

HMIS: 健康/Health: 2 ; 可燃性/Flammability: 1  
 活性/Reactivity: 0 ; 自身保护/Personal protection: B

### 第三段 物理化学特性/SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS.

物理状态: 灰色膏状物 Appearance: Gray Cream	沸点: 不适用 Boiling Point: Not applicable
气味: 温和气味 Odor: Mild Odor	合金熔点: 217-218°C Alloy Melting Point:
pH: 不适用 / Not applicable.	合金比重: 7.4(H <sub>2</sub> O=1) Alloy Specific Gravity:
蒸汽压: 不适用 Vapor Pressure: Not applicable	蒸汽密度: 不适用 Vapor Density: Not applicable(air=1)
挥发速率: 不适用 Evaporation Rate: Not applicable [Butyl Acetate=1]	水中溶解度: 不溶 Solubility in Water: Insoluble

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### 第四段 灾害处理资料/SECTION IV FIRE AND EXPLOSION HAZARD DATA

闪点：不确定 Flash Point: Not established	自燃点：不确定 Auto-ignition Temperature: Not established
空气中爆炸极限：不适用 Flammable Limits: Not applicable	
适用灭火器：二氧化碳、干粉或泡沫灭火器 Extinguishing Media: Carbon Dioxide, Dry Chemical or Foam	
特种火情灭火程序：建议灭火人员穿着防火衣和配戴自带呼吸器的全面保护面罩 Special Fire Fighting Procedures: Firefighters should wear full protective clothing and self-contained breathing apparatus operated in positive pressure mode.	

### 第五段 化学反应特性/SECTION V REACTIVITY DATA

稳定性：稳定 Stability: Stable
应避免条件：避免高于 500°C 以上之高温作业 Conditions to Avoid: Avoid temp. over 500°C
不相容性（须避免原材料）：避免接触强酸、强氧化物 Incompatibility(Materials to Avoid): Avoid contact with strong Acids, strong Oxidizers
产品分解物之危害性：受热时可能会释放出有毒蒸汽或气体，如：一氧化碳，二氧化碳 Hazardous Decomposition / Byproducts: May release toxic vapor/gases such as Carbon Monoxide, Carbon Dioxide when heated.
有害之聚合物：不会有 Hazardous Polymerization: Will not occur

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### 第六段 健康危害资料/SECTION VI HEALTH HAZARDS DATA

进入人体之方法与途径: 1.呼吸进入      2.皮肤接触      3.吞食 Routes of Entry:      1.Inhalation      2.Skin      3.Ingestion
可能产生的健康危害: 急性健康危害: 吸入或摄入烟气, 可以引起头痛, 恶心, 肌肉痛等, 接触回流焊的烟气会导致流鼻涕和流眼泪. 慢性健康危害: 长期摄入并积累后, 可以导致贫血、失眠、神经衰弱、便秘及腹部疼痛。皮肤暴露吸入会导致皮疹, 损害皮肤粘膜。 Potential Health Effects: Acute Health Hazards: Inhalation of fumes or ingestion may cause headache, nausea and muscular pain. Irritation of eye and nose may result from contact with soldering fumes. Chronic Health Hazards: Anemia, insomnia, weakness, constipation and abdominal pain due to ingestion. Skin rash, damage of mucous membrane due to skin exposure and inhalation.
致癌化学品清单: 按 NTP, IARC 及 OSHA 标准, 无 Carcinogenicity: Not listed by carcinogen by NTP, IARC, OSHA .
出现症状: 表现为呼吸性过效, 引发咳嗽或皮疹。 Sign and Symptoms of Exposure: Respiratory irritation and symptoms of asthma, Skin irritation and rash.
内科症状: 肺部、血液疾病及循环系统问题; 肾、神经及生殖系统问题 Medical Conditions Generally Aggravated by Exposure: Pre-existing conditions of the lungs, diseases of the blood and blood forming organs; kidneys, nerves and possibly reproductive systems.
紧急情况的急救措施: 皮肤接触: 用肥皂和水冲洗干净; 眼睛接触: 立即用大量清水冲洗 15 分钟以上, 并送医治 不慎吸入: 将伤员抬至新鲜空气流通的地方休息, 若仍呼吸困难, 则应立即送医治; 不慎食入: 用水漱口, 喝大量的水, 并送医治。 Emergency and First Aid Procedures: Skin contact: Wash off with soap and water. Eye contact: Wash immediately with plenty of water for at least 15 minutes. Seek medical attention. Inhalation: Move affected person to fresh air and allow to rest. If respiratory distress persists, seek medical Attention. Ingestion: Wash out mouth with water, Give a lot of water to drink, and seek medical attention immediately.

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### 第七段 预防措施/SECTION VII SPECIAL PROTECTION / CONTROL MEASURES

呼吸道防护措施：通常无要求 Respiratory Protection: Not generally required.
皮肤防护措施：使用橡胶手套 Skin Protection: Use neoprene gloves.
眼睛防护措施：戴安全护目镜 Eye Protection: Wear safety goggles.
通风设备：于有适当通风的地方使用，设备需配备良好的抽风装置 Ventilation: Use with adequate ventilation and local exhaust
其他防护措施：防护衣，洗眼器 Other Protection: Protective clothing, eye-wash fountain in work area.
工作卫生习惯：作业中不得饮食、抽烟等，作业后要洗手。避免长时间或多次皮肤接触和吸入烟气 Work/Hygienic Practices: Do not eat, drink or smoke in work areas, wash hands thoroughly after use. Avoid prolonged or repeated contact with skin or breathing fumes and vapors.

### 第八段 泄露及废弃处理 / SECTION VIII SPILL/LEAK AND WASTE DISPOSAL PROCEDURES

泄露情况的处理：避免接触皮肤，穿戴适当的保护衣物，将溢出物刮到适当的容器内，并盖紧容器盖。用 IPA 或清洁剂清洗剩余物 Spilled or Released Procedures: Avoid contact with skin. Wear suitable protective clothing. Scrape up spillage and transfer to a closed container. Clean up residual with Isopropanol or detergent water.
废弃处置方法：刮回的合金成份通常仍有价值，可联络回收商，回收再用，或依照国际、国家或地方的相关法规处置 Waste Disposal Method: Scrap metal alloy usually has value, contact a commercial reclaimer for recycling .Otherwise, dispose in accordance with Federal, State and Local regulations.

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### 第九段 操作与储存方法 / SECTION IX HANDLING AND STORAGE

安全操作：不使用时须将容器密封，使用时小心避免泄露。于专为锡膏设计的设备中使用。在使用或搬运锡膏时，需穿戴适当的保护装置，避免接触皮肤，避免吸入烟气。用后洗手，在未彻底将手洗干净前不要用手接触或擦眼睛。

**Handling Precautions:** Keep containers tightly closed when not use. Use care to avoid spills. Use only with production equipment specifically designed for use with solder paste. Wear appropriate personal protective equipment when working or handling solder paste. Avoid contact with skin. Avoid breathing fumes from the heated product. Always thoroughly wash your hands after handling this product. Do Not touch or rub eyes until hands are washed.

储存：紧盖容器顶盖，存放于阴凉、干燥、无明火、无强氧化物和强酸的地方。参考产品标签上的标示设定储存温度。确保于标签上标示的期限前使用，请勿存放于儿童可触及之地点。

**Storage Precautions:** Store product in tightly capped original containers in a cool, dry area away from flame, strong oxidizing agents and concentrated Acid. Refer to product label for specific storage temperature requirements. Rotate stock to ensure use before expiration date on the label. Please keep out of reach of children.

### 第十段 生态学资料 / SECTION X ECOLOGICAL INFORMATION

目前尚未资料

This section is a subject to future development.

### 第十一段 运送资料 / SECTION XI TRANSPORT INFORMATION

本品不含有国际禁运的危险物质

This product is not classified as material hazardous for transport.